

# CERTIFICATE

## (1) EU-Type Examination

(2) **Component intended for use on/in equipment or protective systems intended for use in potentially explosive atmospheres - Directive 2014/34/EU**

(3) EU-Type Examination Certificate Number: **KEMA 04ATEX2048 U** Issue Number: **8**

(4) Product: **Terminal Blocks UT 2,5; UT 4; UT 4-MTD; UT 6; UT 10; UT10 SL; UT 16; UT 35; UT 35 IB  
Protective Conductor Terminal Blocks UT 2,5-PE; UT 4-PE; UT 4-MTD-PE; UT 4-MTD-PE/S; UT 6-PE; UT 10-PE; UT 16-PE; UT 35-PE; UT 35-PE IB  
Pick-off Terminal Blocks AGK 4-UT 10; AGK 4-UT 16; AGK 4-UT 35**

(5) Manufacturer: **Phoenix Contact GmbH & Co. KG**

(6) Address: **Flachsmarktstraße 8, 32825 Blomberg, Germany**

(7) This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) DEKRA Certification B.V., Notified Body number 0344 in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential test report number NL/KEM/ExTR07.0033/07.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

**EN IEC 60079-0 : 2018**

**EN 60079-7 : 2015 + A1 : 2018**

except in respect of those requirements listed at item 18 of the Schedule.

(10) The sign "U" is placed after the certificate number. It indicates that this certificate must not be mistaken for a certificate intended for an equipment or protective system. This partial certification may be used as a basis for certification of an equipment or protective system.

(11) This EU-Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

(12) The marking of the product shall include the following:



**II 2 GD Ex eb IIC Gb**

Date of certification: 28 August 2023  
DEKRA Certification B.V.

R. Schuller  
Certification Manager



® Integral publication of this certificate and adjoining reports is allowed. This Certificate may only be reproduced in its entirety and without any change.

(13) **SCHEDULE**

(14) **to EU-Type Examination Certificate KEMA 04ATEX2048 U**

Issue No. **8**

(15) **Description**

Terminal Blocks (all colors) UT 2,5; UT 4; UT 4-MTD; UT 6; UT 10; UT 10 SL; UT 16; UT 35; UT 35 IB, Protective Conductor Terminal Blocks UT 2,5-PE; UT 4-PE; UT 4-MTD-PE; UT 4-MTD-PE/S; UT 6-PE; UT 10-PE; UT 16-PE; UT 35-PE; UT 35-PE IB and accessories are intended for the connection of copper conductors in enclosures fulfilling the degree of protection which is required by the applied type of protection for the end-application. The Terminal Blocks and Protective Conductor Terminal Blocks are intended for installation on mounting rails type NS 35 according to IEC 60715 Section TH 35.

The Pick-off Terminal Blocks AGK 4-UT 10; AGK 4-UT 16 and AGK 4-UT 35 are to be used in combination with the associated Terminal Blocks UT 10 (SL); UT 16; UT 35 (IB).

Operating temperature range -60 °C to +110 °C.

**Electrical data**

For electrical data and nomenclature see Annex 1 to Report No. NL/KEM/ExTR07.0033/07.

**Installation instructions**

The instructions provided with the product shall be followed in detail to assure safe operation.

(16) **Report Number**

No. NL/KEM/ExTR07.0033/07.

(17) **Schedule of Limitations**

1. The Terminal Blocks, the Protective Conductor Terminal Blocks and the Pick-off Terminal Blocks shall be mounted in a certified enclosure that meets the requirements of a type of protection as specified in EN IEC 60079-0 clause 1, with a degree of protection at least as required for Ex e. For combustible dust these enclosures must satisfy the requirements according to EN IEC 60079-0 and EN 60079-31.
2. When assembling with other certified series and sizes and using the associated accessories, the required creepage distances and clearances have to be observed.
3. The installation instruction of the manufacturer shall be followed e.g. for the use of cover, jumpers, end brackets. The data regarding current and associated temperature rise shall be used as guideline for the given conductor cross sections. The cross section has influence on the temperature rise which shall be assessed in the end application.
4. If the Terminal Blocks and Pick-off Terminal Blocks are used in electrical equipment of temperature classes T1 up to T5, the highest temperature of the insulating material shall not exceed the maximum value of the operating temperature range.
5. If the Terminal Blocks and Pick-off Terminal Blocks are used in electrical equipment of temperature classes T6 the permissible ambient temperature range is -60 °C < Tamb < +40 °C.
6. The electrical data per Annex 1 applies.

(18) **Essential Health and Safety Requirements**

Covered by the standards listed at item (9).

(13) **SCHEDULE**

(14) **to EU-Type Examination Certificate KEMA 04ATEX2048 U**

Issue No. **8**

(19) **Test documentation**

As listed in Report No. NL/KEM/ExTR07.0033/07.

(20) **Certificate history**

|           |           |                                                                                                                 |
|-----------|-----------|-----------------------------------------------------------------------------------------------------------------|
| Issue 0 - | 207223100 | Initial certification.                                                                                          |
| Issue 1 - | 208871800 | Assessment to recent edition of standards, addition of new types of terminal blocks.                            |
| Issue 2 - | 210494600 | Assessment to recent edition of standards, addition of new types of terminal blocks.                            |
| Issue 3 - | 211801500 | Assessment to recent edition of standards, addition of new types of bridges.                                    |
| Issue 4 - | 215216600 | Assessment to recent edition of standards, operating temperature range changed.                                 |
| Issue 5 - | 219562800 | Assessment to recent edition of standards, addition of a new type of terminal blocks, small mechanical changes. |
| Issue 6 - | 224265600 | Assessment to recent edition of standards, addition alternative plastic material bridges.                       |
| Issue 7 - | 225498500 | Introduction of an alternative insulation material for the Insulation body.                                     |
| Issue 8 - | 226295800 | Addition of the rated voltage for bridging between non-adjacent terminal blocks, minor corrections.             |

## Electrical data

Note 1: in this document [,] is used as decimal separator.

All values are values of terminal blocks without bridges, unless indicated otherwise.

### Terminal Blocks

| <b>Type:</b>                                                                | <b>UT 2,5</b>                       | <b>UT 4</b>                       |
|-----------------------------------------------------------------------------|-------------------------------------|-----------------------------------|
| Rated insulation voltage [V]                                                | 630                                 | 630                               |
| Rated voltage [V]                                                           | 690                                 | 690                               |
| Rated voltage with plug-in bridge type FBS                                  |                                     |                                   |
| - at bridging between adjacent terminal blocks [V]                          | 690                                 | 690                               |
| - at bridging between non-adjacent terminal blocks [V]                      | 352                                 | 352                               |
| - with plug-in bridge via PE terminal block [V]                             | 275                                 | 275                               |
| - with cut-to-length bridge and cover type D [V]                            | 220                                 | 220                               |
| - with cut-to-length bridge and partition plate type ATP [V]                | 275                                 | 275                               |
| Rated current [A]                                                           | 21                                  | 30                                |
| - with plug-in bridge type FBS... [A]                                       | 21                                  | 27                                |
| Maximum load current [A]                                                    | 28                                  | 38                                |
| Temperature rise [K]                                                        | 40 K (23,3 A; 2,5 mm <sup>2</sup> ) | 40 K (33,3 A; 4 mm <sup>2</sup> ) |
| Contact resistance [mΩ]                                                     | 0,41                                | 0,26                              |
| Rated cross section [mm <sup>2</sup> ] (AWG)                                | 2,5 (14)                            | 4 (12)                            |
| Connectable conductor cross section                                         |                                     |                                   |
| - rigid [mm <sup>2</sup> ] (AWG)                                            | 0,14 - 4 (26-12)                    | 0,14 - 6 (26-10)                  |
| - flexible [mm <sup>2</sup> ] (AWG)                                         | 0,14 - 2,5 (26-14)                  | 0,14 - 4 (26-12)                  |
| Multiple conductor connection<br>(2 conductors with the same cross section) |                                     |                                   |
| - rigid [mm <sup>2</sup> ] (AWG)                                            | 0,14 - 1,5 (26-16)                  | 0,14 - 1,5 (26-16)                |
| - flexible [mm <sup>2</sup> ] (AWG)                                         | 0,14 - 1,5 (26-16)                  | 0,14 - 1,5 (26-16)                |

| <b>Type:</b>                                                 | <b>UT 4-MTD</b>                    | <b>UT 6</b>                        |
|--------------------------------------------------------------|------------------------------------|------------------------------------|
| Rated insulation voltage [V]                                 | 630                                | 630                                |
| Rated voltage [V]                                            | 690                                | 690                                |
| Rated voltage with plug-in bridge type FBS                   |                                    |                                    |
| - at bridging between adjacent terminal blocks [V]           | 690                                | 690                                |
| - at bridging between non-adjacent terminal blocks [V]       | 352                                | 275                                |
| - at bridging via PE terminal block [V]                      | 275                                | 176                                |
| - at bridging via PE/S terminal block [V]                    | 176                                | -                                  |
| - with cut to length bridge and cover type D [V]             | 220                                | 220                                |
| - with cut to length bridge and partition plate type ATP [V] | 275                                | 275                                |
| Rated current [A]                                            | 29                                 | 40                                 |
| - with plug-in bridge type FBS... [A]                        | 29                                 | 39                                 |
| Maximum load current [A]                                     | 36                                 | 50                                 |
| Temperature rise [K]                                         | 40 K (32,0 A; 4 mm <sup>2</sup> )  | 40 K (44,9 A; 6 mm <sup>2</sup> )  |
| Contact resistance [mΩ]                                      | 0,32                               | 0,20                               |
| Rated cross section [mm <sup>2</sup> ] (AWG)                 | 4 (12)                             | 6 (10)                             |
| Connectable conductor cross section                          |                                    |                                    |
| - rigid [mm <sup>2</sup> ] (AWG)                             | 0,14 - 6 (26-10)                   | 0,2 - 10 (24-8)                    |
| - flexible [mm <sup>2</sup> ] (AWG)                          | 0,14 - 4 (26-12)                   | 0,2 - 6 (24-10)                    |
| Multiple conductor connection                                |                                    |                                    |
| (2 conductors with the same cross section)                   |                                    |                                    |
| - rigid [mm <sup>2</sup> ] (AWG)                             | 0,14 - 1,5 (26-16)                 | 0,2 - 2,5 (24-14)                  |
| - flexible [mm <sup>2</sup> ] (AWG)                          | 0,14 - 1,5 (26-16)                 | 0,2 - 2,5 (24-14)                  |
| <b>Type:</b>                                                 | <b>UT 10 (SL)</b>                  | <b>UT 16</b>                       |
| Rated insulation voltage [V]                                 | 630                                | 630                                |
| Rated voltage [V]                                            | 690                                | 690                                |
| - with plug-in bridge type FBS [V]                           | 690                                | 690                                |
| Rated current [A]                                            | 54                                 | 73,5                               |
| - with plug-in bridge type FBS [A]                           | 54                                 | 73,5                               |
| Maximum load current [A]                                     | 69                                 | 89,5                               |
| Temperature rise [K]                                         | 40 K (60,1 A; 10 mm <sup>2</sup> ) | 40 K (80,5 A; 16 mm <sup>2</sup> ) |
| Contact resistance [mΩ]                                      | 0,16                               | 0,16                               |
| Rated cross [mm <sup>2</sup> ] (AWG)                         | 10 (8)                             | 16 (6)                             |
| Connectable conductor cross section                          |                                    |                                    |
| - rigid [mm <sup>2</sup> ] (AWG)                             | 0,5 - 16 (20-6)                    | 1,5 - 25 (16-4)                    |
| - flexible [mm <sup>2</sup> ] (AWG)                          | 0,5 - 10 (20-8)                    | 1,5 - 16 (16-6)                    |
| Multiple conductor connection                                |                                    |                                    |
| (2 conductors with the same cross section)                   |                                    |                                    |
| - rigid [mm <sup>2</sup> ] (AWG)                             | 0,5 - 4 (20-12)                    | 1,0 - 6 (18-10)                    |
| - flexible [mm <sup>2</sup> ] (AWG)                          | 0,5 - 4 (20-12)                    | 1,0 - 4 (18-12)                    |

|                                              |                                     |
|----------------------------------------------|-------------------------------------|
| <b>Type:</b>                                 | <b>UT 35 (IB)</b>                   |
| Rated insulation voltage [V]                 | 630                                 |
| Rated voltage [V]                            | 690                                 |
| - with plug-in bridge type FBS [V]           | 690                                 |
| Rated current [A]                            | 123                                 |
| - with plug-in bridge type FBS [A]           | 98,5                                |
| Maximum load current [A]                     | 129                                 |
| Temperature rise [K]                         | 40 K (133,6 A; 35 mm <sup>2</sup> ) |
| Contact resistance [mΩ]                      | 0,08                                |
| Rated cross section [mm <sup>2</sup> ] (AWG) | 35 (2)                              |
| Connectable conductor cross section          |                                     |
| - rigid [mm <sup>2</sup> ] (AWG)             | 1,5 - 50 (16-1/0)                   |
| - flexible [mm <sup>2</sup> ] (AWG)          | 1,5 - 35 (16-2)                     |
| Multiple conductor connection                |                                     |
| (2 conductors with the same cross section)   |                                     |
| - rigid [mm <sup>2</sup> ] (AWG)             | 1,5 - 16 (16-6)                     |
| - flexible [mm <sup>2</sup> ] (AWG)          | 1,5 - 10 (16-8)                     |

#### Protective Conductor Terminal Blocks

|                                              |                    |                      |
|----------------------------------------------|--------------------|----------------------|
| <b>Type:</b>                                 | <b>UT 2,5-PE</b>   | <b>UT 4-PE</b>       |
| Rated cross section [mm <sup>2</sup> ] (AWG) | 2,5 (14)           | 4 (12)               |
| Connectable conductor cross section          |                    |                      |
| - rigid [mm <sup>2</sup> ] (AWG)             | 0,14 - 4 (26-12)   | 0,14 - 6 (26-10)     |
| - flexible [mm <sup>2</sup> ] (AWG)          | 0,14 - 2,5 (26-14) | 0,14 - 4 (26-12)     |
| <b>Type:</b>                                 | <b>UT 4-MTD-PE</b> | <b>UT 4-MTD-PE/S</b> |
| Rated cross section [mm <sup>2</sup> ] (AWG) | 4 (12)             | 4 (12)               |
| Connectable conductor cross section          |                    |                      |
| - rigid [mm <sup>2</sup> ] (AWG)             | 0,14 - 6 (26-10)   | 0,14 - 6 (26-10)     |
| - flexible [mm <sup>2</sup> ] (AWG)          | 0,14 - 4 (26-12)   | 0,14 - 4 (26-12)     |
| <b>Type:</b>                                 | <b>UT 6-PE</b>     | <b>UT 10-PE</b>      |
| Rated cross section [mm <sup>2</sup> ] (AWG) | 6 (10)             | 10 (8)               |
| Connectable conductor cross section          |                    |                      |
| - rigid [mm <sup>2</sup> ] (AWG)             | 0,2 - 10 (24-8)    | 0,5 - 16 (20-6)      |
| - flexible [mm <sup>2</sup> ] (AWG)          | 0,2 - 6 (24-10)    | 0,5 - 10 (20-8)      |
| <b>Type:</b>                                 | <b>UT 16-PE</b>    | <b>UT 35-PE (IB)</b> |
| Rated cross section [mm <sup>2</sup> ] (AWG) | 16 (6)             | 35 (2)               |
| Connectable conductor cross section          |                    |                      |
| - rigid [mm <sup>2</sup> ] (AWG)             | 1,5 - 25 (16-4)    | 1,5 - 35 (16-2)      |
| - flexible [mm <sup>2</sup> ] (AWG)          | 1,5 - 16 (16-6)    | 1,5 - 35 (16-2)      |

Pick-off Terminal Blocks

**Type:**

|                                              | <b>AGK 4-UT 10</b>                | <b>AGK 4-UT 16</b>                |
|----------------------------------------------|-----------------------------------|-----------------------------------|
| Rated insulation voltage [V]                 | 400                               | 630                               |
| Rated voltage [V]                            | 440                               | 690                               |
| Rated current [A]                            | 32                                | 32                                |
| Maximum load current [A]                     | 41                                | 41                                |
| Temperature rise [K]                         | 40 K (34,0 A; 4 mm <sup>2</sup> ) | 40 K (36,0 A; 4 mm <sup>2</sup> ) |
| Contact resistance [mΩ]                      | 0,42                              | 0,43                              |
| Rated cross section [mm <sup>2</sup> ] (AWG) | 4 (12)                            | 4 (12)                            |
| Connectable conductor cross section          |                                   |                                   |
| - rigid [mm <sup>2</sup> ] (AWG)             | 0,14 - 6 (26-10)                  | 0,14 - 6 (26-10)                  |
| - flexible [mm <sup>2</sup> ] (AWG)          | 0,14 - 4 (26-12)                  | 0,14 - 4 (26-12)                  |
| Multiple conductor connection                |                                   |                                   |
| (2 conductors with the same cross section)   |                                   |                                   |
| - rigid [mm <sup>2</sup> ] (AWG)             | 0,14 - 1,5 (26-16)                | 0,14 - 1,5 (26-16)                |
| - flexible [mm <sup>2</sup> ] (AWG)          | 0,14 - 1,5 (26-16)                | 0,14 - 1,5 (26-16)                |

**Type:**

|                                              | <b>AGK 4-UT 35</b>                |
|----------------------------------------------|-----------------------------------|
| Rated insulation voltage [V]                 | 630                               |
| Rated voltage [V]                            | 690                               |
| Rated current [A]                            | 32                                |
| Maximum load current [A]                     | 41                                |
| Temperature rise [K]                         | 40 K (40,0 A; 4 mm <sup>2</sup> ) |
| Contact resistance [mΩ]                      | 0,43                              |
| Rated cross section [mm <sup>2</sup> ] (AWG) | 4 (12)                            |
| Connectable conductor cross section          |                                   |
| - rigid [mm <sup>2</sup> ] (AWG)             | 0,14 - 6 (26-10)                  |
| - flexible [mm <sup>2</sup> ] (AWG)          | 0,14 - 4 (26-12)                  |
| Multiple conductor connection                |                                   |
| (2 conductors with the same cross section)   |                                   |
| - rigid [mm <sup>2</sup> ] (AWG)             | 0,14 - 1,5 (26-16)                |
| - flexible [mm <sup>2</sup> ] (AWG)          | 0,14 - 1,5 (26-16)                |

## Nomenclature

### Terminal Blocks

UT      \*      -MTD  
 I          II          III

| Designation | Explanation         | Value                           | Explanation                                                                                                                                                                        |
|-------------|---------------------|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I           | Type indicator      | UT                              | <u>U</u> niversal <u>T</u> erminal block with screw connection                                                                                                                     |
| II          | Rated cross section | 2,5<br>4<br>6<br>10<br>16<br>35 | 2,5 mm <sup>2</sup> , 14 AWG<br>4 mm <sup>2</sup> , 12 AWG<br>6 mm <sup>2</sup> , 10 AWG<br>10 mm <sup>2</sup> , 8 AWG<br>16 mm <sup>2</sup> , 6 AWG<br>35 mm <sup>2</sup> , 2 AWG |
| III         | Options             | None<br>-MTD<br>IB<br>SL        | -<br>No disconnection function (only UT 4)<br><u>I</u> n <u>B</u> us screw connection (only UT 35)<br><u>S</u> ix- <u>L</u> obe screw (only UT 10)                                 |

### Protective Conductor Terminal Blocks

UT      \*      -MTD-      PE      /      S  
 I          II          III          IV

| Designation | Explanation         | Value                           | Explanation                                                                                                                                                                                                                                                                                                                                                                        |
|-------------|---------------------|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I           | Type indicator      | UT                              | <u>U</u> niversal <u>T</u> erminal block with screw connection                                                                                                                                                                                                                                                                                                                     |
| II          | Rated cross section | 2,5<br>4<br>6<br>10<br>16<br>35 | 2,5 mm <sup>2</sup> , 14 AWG<br>4 mm <sup>2</sup> , 12 AWG<br>6 mm <sup>2</sup> , 10 AWG<br>10 mm <sup>2</sup> , 8 AWG<br>16 mm <sup>2</sup> , 6 AWG<br>35 mm <sup>2</sup> , 2 AWG                                                                                                                                                                                                 |
| III         | Option              | -<br>-MTD-                      | None<br>No disconnection function (only UT 4)                                                                                                                                                                                                                                                                                                                                      |
| IV          | Terminal block      | PE<br>PE/S<br>PE IB             | <u>P</u> rotective <u>E</u> arth, green-yellow colour, with a spring for mounting rail contact<br><u>P</u> rotective <u>E</u> arth, green-yellow colour, with a screwed clamp for mounting rail contact (only UT 4-MTD)<br><u>P</u> rotective <u>E</u> arth, green-yellow colour, with a spring for mounting rail contact and <u>I</u> n <u>B</u> us screw connection (only UT 35) |

Pick-off Terminal Blocks

AGK    \*    -    UT    -    \*  
I        II        III        IV

| Designation | Explanation                                   | Value          | Explanation                                                                            |
|-------------|-----------------------------------------------|----------------|----------------------------------------------------------------------------------------|
| I           | Type indicator                                | AGK            | Pick-off terminal block with screw connection                                          |
| II          | Rated cross section                           | 4              | 4 mm <sup>2</sup> , 12 AWG                                                             |
| III         | Type indicator associated terminal block      | UT             | Type indicator associated <u>U</u> niversal <u>T</u> erminal block                     |
| IV          | Rated cross section associated terminal block | 10<br>16<br>35 | 10 mm <sup>2</sup> , 8 AWG<br>16 mm <sup>2</sup> , 6 AWG<br>35 mm <sup>2</sup> , 2 AWG |

Plug-in bridge FBS

FBS    \*    -    \*  
I        II        III

| Designation | Explanation                       | Value                         | Explanation                                                                                                                                                                                                                                       |
|-------------|-----------------------------------|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I           | Type indicator                    | FBS                           | Plug-in-bridge                                                                                                                                                                                                                                    |
| II          | Number of positions               | 2<br>3<br>4<br>5<br>10<br>20  | Amount of contacts;<br>2 contacts (for all series)<br>3 contacts (for UT 2,5; UT 4; UT 6)<br>4 contacts (for UT 2,5; UT 4; UT 6)<br>5 contacts (for UT 2,5; UT 4; UT 6)<br>10 contacts (for UT 2,5; UT 4; UT 6)<br>20 contacts (for UT 2,5; UT 4) |
| III         | Pitch between electrical contacts | 5<br>6<br>8<br>10<br>12<br>16 | 5,2 mm (for UT 2,5)<br>6,2 mm (for UT 4)<br>8,2 mm (for UT 6)<br>10,2 mm (for UT 10)<br>12 mm (for UT 16)<br>16 mm (for UT 35)                                                                                                                    |